

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species Name	Status ¹ (code definitions provided on pg. 16 of 17)			Associated Habitats	Potential to Occur in the Project Site
	Federal	State	CNPS		
Invertebrates					
<i>Anthicus antiochensis</i> Antioch Dunes anthicid beetle	SC	none	NA	Known only from the Antioch dunes.	No habitat.
<i>Anthicus sacramento</i> Sacramento anthicid beetle	SC	none	NA	Sand slipfaces among bamboo and willow. Restricted to sand dune areas of the Sacrament – San Joaquin Delta.	No habitat.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	T	none	NA	Vernal pools and other seasonally ponded depressions.	No habitat.
<i>Branchinecta mesovallensis</i> Midvalley fairy shrimp	SC	SC	NA	Vernal pools and other seasonally ponded depressions.	No habitat.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	T	none	NA	Elderberry shrubs, especially those with stems greater than one inch diameter. Species distribution is patchy through Central Valley. Occurs in Contra Costa County east of Pittsburg and the Mt. Diablo Range (USFWS 1997)	Project site is not within geographic range of species. Single elderberry shrub found on Zinc Hill. No exit holes were found (URS 2002)
<i>Elaphrus viridis</i> delta green ground beetle	T	none	NA	Vernal pools and adjacent grasslands	No habitat.
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	SC	none	NA	Found in marshy areas, weedy shallow ponds around the San Francisco Bay area. Associated with vernal pool habitats (Keeler-Wolf <i>et al</i> , 1998).	Low. No CNDDDB occurrences. ² No vernal pools in the project site.
<i>Hygrotus curvipes</i> curved-foot hygrotus diving beetle	SC	none	NA	Fresh to brackish waters of small mineralized ponds, alkali vernal pools, and intermittent creek channels. Only reported in a pond near Oakley, Contra Costa County and in and near the Kellogg Creek watershed of Contra Costa and Alameda Counties (Morton, 1995).	Low. No CNDDDB occurrences. Not within know distribution area.

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<i>Lindieriella occidentalis</i> California linderiella fairy shrimp	SC	SC	NA	Vernal pools and other seasonally ponded depressions.	No habitat.
<i>Speyeria callippe callippe</i> callippe silverspot butterfly	E	none	NA	Open hillsides supporting wild pansy (<i>Viola pedunculata</i>), its larval host plant. On the San Francisco peninsula, this butterfly is now only known from San Bruno Mountain (approximately 10 miles south of San Francisco). In the East Bay, it was known from Richmond in the north to the Castro Valley in Alameda County (Morton, 1995).	No habitat. No CNDDDB occurrences. No occurrences during survey on Zinc Hill for wild pansy during the flowering period.
<i>Syncaris pacifica</i> California freshwater shrimp	E	E	NA	Pool areas of low-elevation, low-gradient freshwater streams, in undercut banks, overhanging woody debris, or overhanging vegetation (CDFG, 2001c).	No habitat.
Fish					
<i>Acipenser medirostris</i> green sturgeon	SC	SC	NA	Rivers and estuaries. Spawning is believed to occur in the upper portions of the Sacramento River (Morton, 1995).	Low. No CNDDDB occurrences in the project site. No historical captures.
<i>Hypomesus transpacificus</i> delta smelt	T	T	NA	Euryhaline species, but for a large part of its life span, it is associated with the freshwater edge of the mixing zone (saltwater-freshwater interface). Spawning habitats are side channels and sloughs in the middle reaches of the Delta (Wang, 1986). Spawn in shallow freshwater from December through July (Goals Project, 2000). Pelagic feeder.	No spawning habitat on the project site; Low potential for foraging, as species is predominantly pelagic.

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Species Name	Status ¹ (code definitions provided on pg. 16 of 17)			Associated Habitats	Potential to Occur in the Project Site
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Critical habitat for delta smelt, (<i>Hypomesus transpacificus</i>)	T	none	NA	Adults and yearlings are found in the freshwater edge of the mixing zone (saltwater-freshwater interface). Spawning habitats are side channels and sloughs in the middle reaches of the Delta (Wang, 1986).	Low. Site has potential to be within mixing zone, however Peyton Slough is too brackish for spawning. Foraging potential is low as species is predominantly pelagic.
<i>Lampetra ayresi</i> river lamprey	SC	SC	NA	Freshwater streams, estuaries, and open marine (McGinnis, 1984).	Low. No CNDDDB occurrences in the project site. No historical captures.
<i>Lampetra tridentata</i> Pacific lamprey	SC	SC	NA	Freshwater streams, estuaries, and open marine (McGinnis, 1984).	Medium. No CNDDDB occurrences in the project site. No historical captures.
<i>Oncorhynchus mykiss</i> steelhead - Central Valley California ESU	T	none	NA	Most of its adult life is in the open ocean. Migrate upstream through the Carquinez Strait from August through May and downstream from spawning grounds during spring and early summer (Goals Project, 2000).	Low. No CNDDDB occurrences in the project site. No historical captures. ³
<i>Oncorhynchus tshawytscha</i> Sacramento River winter-run Chinook salmon	E	E	NA	Freshwater streams and open ocean. Migrates upstream through the Carquinez Strait from December through July and migrates downstream from spawning grounds from November through May into estuaries and the open ocean (Goals Project, 2000).	Medium. Three Chinook smolts captured during sampling efforts (between May 1986 - Apr 1987 and fall 1998 - summer 2001). ³ No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).

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Critical habitat for Sacramento River winter-run Chinook salmon, (<i>Oncorhynchus tshawytscha</i>)	E	none	NA	Spawning habitats are upper reaches of freshwater streams. Migration habitat comprised of route between spawning streams and open ocean. Migrate upstream through the Carquinez Strait between December and July and downstream from spawning grounds from November through May (Goals Project, 2000).	Low. As species migrates through the Carquinez Strait, length of Site along Strait is approximately 1,000 feet and does not significantly enter into the waterway. No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).
<i>Oncorhynchus tshawytscha</i> Central Valley spring-run Chinook salmon	T	T	NA	Freshwater streams and open ocean. Migrates upstream through the Carquinez Strait from March through July and migrates downstream from spawning grounds from November through June into estuaries and the open ocean (Goals Project, 2000).	Medium. Three Chinook smolts captured during sampling efforts (between May 1986 - Apr 1987 and fall 1998 - summer 2001). ³ No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).
Critical habitat for Central Valley spring-run Chinook salmon, (<i>Oncorhynchus tshawytscha</i>) ⁴	T ⁴	none	NA	Spawning habitats are upper reaches of freshwater streams. Migration habitat comprised of route between spawning streams and open ocean. Migrate upstream through the Carquinez Strait between March and July and downstream from spawning grounds from November through June (Goals Project, 2000).	Low. As species migrates through the Carquinez Strait, length of Site along Strait is approximately 1000 feet and does not significantly enter into the waterway. No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).

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<i>Oncorhynchus tshawytscha</i> Central Valley fall/late fall-run Chinook salmon	Ca	SC	NA	Freshwater streams and open ocean. Migrate upstream through the Carquinez Strait from June through April and downstream from spawning grounds from October through May (Goals Project, 2000).	Medium. Three Chinook smolts captured during sampling efforts (between May 1986 - Apr 1987 and fall 1998 - summer 2001). ³ No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).
Critical habitat for Central Valley fall/late fall-run Chinook salmon, (<i>Oncorhynchus tshawytscha</i>) ⁴	Ca ⁴	none	NA	Spawning habitats are upper reaches of freshwater streams. Migration habitat comprised of route between spawning streams and open ocean. Migrate upstream through the Carquinez Strait from June through April and downstream from spawning grounds from October through May (Goals Project, 2000).	Low. As species migrates through the Carquinez Strait, length of Site along Strait is approximately 1000 feet and does not significantly enter into the waterway. No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	T	SC	NA	Euryhaline species, but prefer freshwater. Primarily found in backwater sloughs of the Sacramento-San Joaquin Delta and Suisun Marsh. Upstream spawning migration occurs from November through May into freshwater habitats (Goals Project, 2000).	High. Species has been captured in previous trapping efforts in the Peyton Slough. ³ No spawning habitat as water is too brackish. Tide gates have prevented access to fresher waters since the early 1900s (JRP, 1997).

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<i>Spirinchus thaleichthys</i> longfin smelt	SC	SC	NA	Moderately saline water in all major bays and estuaries from the San Francisco Bay northward. Spawns in lower reaches of rivers which enter into the bays (McGinnis, 1984).	Medium. No CNDDDB occurrences in the project site. No historical captures. ³ However, potential foraging habitat does exist within the project site.
Amphibians					
<i>Rana aurora draytonii</i> California red-legged frog	T	SC Pr	NA	Dense, shrubby riparian vegetation associated with deep (≥ 0.7 m), still or slow-moving water (CDFG, 2001c).	Low. No known occurrences within 6 miles of the project site. Saline conditions preclude potential breeding habitat.
<i>Rana boylei</i> foothill yellow-legged frog	SC	SC	NA	In or near rocky freshwater streams in a variety of habitats (CDFG, 1988).	No habitat.
<i>Scaphiopus hammondi</i> western spadefoot toad	SC	SC Pr	NA	Grassland habitats with shallow temporary pools, occasionally in valley-foothill hardwood woodlands (CDFG, 1988).	No habitat.
Reptiles					
<i>Anniella pulchra pulchra</i> silvery legless lizard	SC	SC	NA	Coastal dune, valley-foothill chaparral, and coastal scrub habitats; areas with sandy or loose organic soils, or plenty of leaf litter (CDFG, 1988)	No habitat.
<i>Clemmys marmorata marmorata</i> northwestern pond turtle	SC	SC Pr	NA	Permanent or nearly permanent water with basking sites and upland for nest sites. The northwestern pond turtle is found north of the San Francisco Bay-Delta Estuary. There is evidence to suggest that the two subspecies of western pond turtle may intergrade between the San Francisco Bay region and the San Joaquin Valley (DWR, 1997).	Medium. The species has been observed 0.5 miles upstream from the project site in the McNabney Marsh (McGinnis, 2001, pers. comm.).

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<i>Clemmys marmorata pallida</i> southwestern pond turtle	SC	SC Pr	NA	Permanent or nearly permanent water with basking sites and upland for nest sites. The southwestern pond turtle is found south of the San Francisco Bay (DWR, 1997).	Medium. The species has been observed 0.5 miles upstream from the project site in the McNabney Marsh (McGinnis, 2001, pers. comm.).
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	T	Pr	NA	Valley-foothill riparian habitats, valley-foothill hardwoods, and hardwood-conifer.	No habitat.
<i>Phrynosoma coronatum frontale</i> California horned lizard	SC	SC Pr	NA	Valley foothill hardwood, conifer and riparian habitats, as well as pine-cypress, juniper, and annual grass habitats. Open country, especially sandy areas, washes, flood plains, and wind-blown deposits (CDFG, 1988).	No habitat.
<i>Thamnophis gigas</i> giant garter snake	T	T Pr	NA	Freshwater marshes, low gradient streams, drainage canals, and irrigation ditches.	No habitat.
Birds					
<i>Agelaius tricolor</i> tricolored blackbird	SC MNBMC	SC	NA	Forages in open valleys and foothills in streamside timber, alfalfa and rice fields. Nests primarily in blackberry thickets, tules and cattails on and around marshes and reservoirs.	Does not breed in the project site. Nearest breeding population is near Pacheco Creek, 1.5 miles east of the project site. High potential for foraging at project site. Species has been observed in the past foraging 0.25 miles south in McNabney Marsh (pers. comm., Bogart 2002).
<i>Ammodramus savannarum</i> grasshopper sparrow	SC MNBMC	none	NA	Dry, dense grasslands, especially with a variety of grasses and tall forbs and scattered shrubs for singing perches; hillsides and mesas in coastal districts (CDFG, 1990a).	No habitat.

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<i>Asio flammeus</i> short-eared owl	SC MNBMC	SC	NA	Open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands (CDFG, 1990a).	No habitat.
<i>Athene cunicularia hypugaea</i> western burrowing owl	SC MNBMC	SC	NA	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation with underground refuges.	Low. Potential habitat is located in the disturbed grassland of the staging area. No potential burrows were observed during reconnaissance by URS biologists in January, 2002.
<i>Branta canadensis leucopareia</i> Aleutian Canada goose	D	none	NA	Lacustrine, fresh emergent wetlands and moist grasslands, croplands, pastures, and meadows (CDFG, 1990a).	No habitat.
<i>Buteo regalis</i> ferruginous hawk	SC MNBMC	SC	NA	Winters in California in undisturbed grassland and agricultural areas. Forages in open habitats, such as grasslands, shrub steppes, sagebrush, deserts, saltbush-greasewood shrublands, and outer edges of pinyon-pine and other forests (CSU, 2001).	No habitat.
<i>Calypte costae</i> Costa's hummingbird	SC	SC	NA	Found in desert-like habitats (CDFG, 1990a).	No habitat.
<i>Carduelis lawrencei</i> Lawrence's goldfinch	SC MNBMC	none	NA	Breeds in open oak or other arid woodland, near water. Found in valley foothill hardwood/conifer, desert riparian, pinyon-juniper, and lower montane habitats. Winters in southern California (CDFG, 1990a).	No habitat.

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<i>Chaetura vauxi</i> Vaux's swift	SC MNBMC	SC	NA	Summer resident of northern CA. Breeds in the Coast Ranges from Sonoma Co. north and the Sierra Nevada. Prefers redwood and Douglas-fir habitats. Fairly common migrant throughout most of the state in April and May, and August and September. May winters in southern CA (CDGF, 1988b).	No habitat.
<i>Charadrius montanus</i> mountain plover	PT MNBMC	SC	NA	High plains and semi-desert regions. Forages on alkaline flats, plowed ground, grazed pasture, and dry short grass prairie. Does not nest in California (CSU, 2001).	No habitat.
<i>Chlidonias niger</i> black tern	SC MNBMC	SC	NA	Spring and summer visitor to fresh emergent wetlands of CA. Currently fairly common migrant and breeder on wetlands of the northeastern plateau area. Fairly common on bays, salt ponds, river mouths, and pelagic waters in spring and fall migration (CDFG, 1990a).	Low. No CNDDDB occurrences within the project site. Potential habitat within the project site for migrants.
<i>Cypseloides niger</i> black swift	SC MNBMC	SC	NA	Breeds in coastal bluffs and mountains. Nests on sea cliffs above the surf, or adjacent to waterfalls. Forages widely over many habitats. In migration, rare and irregular outside the breeding range; does not winter in the state (CDFG, 1990a).	No habitat. No CNDDDB occurrences within the project site.
<i>Elanus leucurus</i> white-tailed (=black shouldered) kite	SC MNBMC	SC F Pr	NA	Agricultural areas, herbaceous and open stages of most habitats, mostly in cismontane CA. Coastal and valley lowlands.	High. The species has been observed in the project site (Evens, 2001).
<i>Empidonax traillii brewsteri</i> little willow flycatcher	SC	E	NA	Montane meadow and willow riparian habitats (CDFG, 2001c).	No habitat.

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<i>Falco peregrinus anatum</i> American peregrine falcon	D MNBMC	E F Pr	NA	Breeds mostly in woodland, forest, and coastal habitats on protected cliffs and ledges. Also nests on bridges and buildings in urban areas. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons (CDFG, 2001c).	Low. No roosting habitat on the project site. No CNDDDB occurrences in or near the project site.
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	SC	SC	NA	Dense, brushy habitats, generally associated with freshwater marshes, coastal swales, swampy riparian thickets, brackish marshes, salt marshes, and the edges of disturbed weed fields and grasslands that border soggy habitats (Goals Project, 2000).	High. Species has been heard calling within the project site (Evens, 2002).
<i>Grus canadensis tabida</i> greater sandhill crane	none	T F Pr	NA	In the winter found in annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands. Avoids saline water. Does not summer in the project area (CDFG, 1990a).	No habitat.
<i>Haliaeetus leucocephalus</i> bald eagle	PD	E F Pr	NA	Winters throughout most of California at lakes, reservoirs, river systems, and some rangelands and coastal wetlands on protected cliffs and ledges. Also nests on bridges and buildings in urban areas. Nests are normally built in the upper canopy of large trees, usually conifers (CDFG, 2001c).	Low. No roosting habitat on the project site. No CNDDDB occurrences in or near the project site.
<i>Lanius ludovicianus</i> loggerhead shrike	SC	SC	NA	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill-woodland, juniper, desert riparian, and Joshua tree habitats (CDFG, 1990a).	High. Species has historically been observed within the project site (Demgen, 2002, pers. comm.).

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<i>Laterallus jamaicensis coturniculus</i> black rail	MNBMC	T F Pr	NA	Tidal and brackish marshes bordering larger bays. Prefers pickleweed (<i>Salicornia virginica</i>) dominated tidal marshes.	High. Species has been heard calling within the project site (Evens, 2001).
<i>Melanerpes lewis</i> Lewis' woodpecker	SC	none	NA	Open oak savannahs, broken deciduous, and coniferous habitats with brushy understory (CDFG, 1990a).	No habitat.
<i>Melospiza melodia maxillaris</i> Suisun song sparrow	SC	SC	NA	Brackish marshes near Suisun Bay in cattails, tules, sedges, and pickleweed (Goals Project, 2000).	High. Species has been heard calling within the project site (Evens, 2001).
<i>Numenius americanus</i> long-billed curlew	SC MNBMC	SC	NA	Breeds in northeastern CA. In winter, found along most of the CA coast; the majority of winter occurrences are in the Central and Imperial valleys. Winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats (CDFG, 1990a).	Low. No CNDDDB occurrences in or near the project site. Potential foraging habitat during low tides along the area of the project site that borders the Carquinez Strait.
<i>Rallus longirostris obsoletus</i> California clapper rail	E	E F Pr	NA	Tidal salt marshes near tidal sloughs. Known breeding population is located at Pacheco Creek, 1.5 miles east of the project site (Evens, 2001).	Low. No CNDDDB historical occurrences in the project site. Species-specific surveys conducted within the breeding season of the species did not identify presence in or near the project site (Evens, 2001).
<i>Riparia riparia</i> bank swallow	none	T	NA	Summer resident in riparian and other lowland habitats in CA west of the deserts. Restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils. Migrant in central CA, less common on the coast. In migration, flocks with other swallows over many open habitats (CDFG, 1990a).	No roosting habitat in or near the project site. Not likely to be within migration corridor based on know distribution. No CNDDDB occurrences within the project site.

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<i>Selasphorus rufus</i> rufous hummingbird	SC MNBMC	none	NA	Wide variety of habitats that provide nectar-producing flowers; valley foothill hardwood, valley foothill hardwood-conifer, riparian, and various chaparral habitats (CDFG, 1990a).	No habitat.
<i>Selasphorus sasin</i> Allen's hummingbird	SC	SC	NA	Coastal scrub and valley foothill hardwood and riparian; breeds in sparse and open woodlands, coastal redwoods, and sparse and dense scrub habitats (CDFG, 1990a).	No habitat.
<i>Sterna antillarum</i> (=albifrons) <i>browni</i> California least tern	E MNBMC	E F Pr	NA	Migratory in CA, usually arriving at breeding territory in mid-May. Breeding colonies located in abandoned salt ponds and along estuarine shores (CDFG, 1990a). Closest known breeding colony is at the Pittsburg PG&E facility, located 10 miles east of the project site.	Low. No potential roosting habitat is located on the project site. Foraging potential is low, as prey species are not typically found in shallow channels of Peyton Slough.
Mammals					
<i>Corynorhinus</i> (=Plecotus) <i>townsendii townsendii</i> Pacific western big-eared bat	SC	SC	NA	All habitats but subalpine and alpine habitats. Most abundant in mesic habitats (CDFG, 1990b).	Low. No CNDDDB occurrences in the project site. No roosting habitat is located within the project site.
<i>Eumops perotis californicus</i> greater western mastiff bat	SC	SC	NA	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban (CDFG, 1990b).	Low. No CNDDDB occurrences in the project site. No roosting habitat is located within the project site.
<i>Myotis ciliolabrum</i> small-footed myotis bat	SC	none	NA	Relatively arid wooded and brushy uplands near water (CDFG, 1990b).	No habitat.
<i>Myotis evotis</i> long-eared myotis bat	SC	none	NA	Prefers coniferous woodlands and forests; but found in nearly all brush, woodland, and forest habitats (CDFG, 1990b).	No habitat.

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<i>Myotis thysanodes</i> fringed myotis bat	SC	none	NA	Occurs in a wide variety of habitats, but prefers pinyon-juniper, valley-foothill hardwood and hardwood-conifer. (CDFG, 1990b).	No habitat.
<i>Myotis volans</i> long-legged myotis bat	SC	none	NA	Woodland and forest habitats above 1200 ft. Also in chaparral, coastal scrub, Great Basin shrub habitats, and in early successional stages of woodlands and forest. Uncommon in desert and arid grassland habitats (CDFG, 1990b).	No habitat.
<i>Myotis yumanensis</i> Yuma myotis bat	SC	none	NA	Open forests and woodlands with sources of water over which to feed (CDFG, 1990b).	No habitat.
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	SC	SC	NA	Areas supporting brush, preferably with an overstory of trees.	No habitat.
<i>Neotoma fuscipes riparia</i> riparian (San Joaquin Valley) woodrat	E	SC	NA	Areas supporting brush, preferably with an overstory of trees.	No habitat.
<i>Perognathus inornatus</i> San Joaquin pocket mouse	SC	none	NA	Dry, open grasslands or scrub areas on fine-textured soils between 350 and 600 m (CDFG, 1990b).	No habitat.
<i>Reithrodontomys raviventris</i> salt marsh harvest mouse	E	E F Pr	NA	Pickleweed (<i>Salicornia virginica</i>) salt marsh.	High. Species has been captured in pickleweed patch located approximately 300 feet south of the staging area and 700 feet west of the Action Area of the existing Slough south of the levee (Woodward-Clyde, 1995).

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<i>Sorex ornatus sinuosus</i> Suisun ornate shrew	SC	SC	NA	Found in tidal marshes near San Pablo and Suisun bays. Current known distribution of the species is to the north of the Carquinez Strait (Goals Project, 2000). Nests and forages in low-lying driftwood and litter above the mean high tide line. Prefers pickleweed habitats.	Low. No CNDDDB occurrences within the project site. The project site is not within the known distribution of the species.
Plants					
<i>Aster lentus</i> Suisun Marsh aster	SC	None	1B	Brackish and freshwater marshes, most often seen along sloughs with <i>Phragmites</i> , <i>Scirpus</i> , blackberry, <i>Typha</i> , etc. Endemic to the Sacramento/San Joaquin River Delta; 0-3 meters; Aug-Nov	High. Species is known to occur in many areas in the immediate vicinity.
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> big-scale balsamroot	SCL	None	1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes serpentinite; 35-1000 meters; March-June	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Blepharizonia plumosa</i> ssp. <i>Plumose</i> big tarplant	SC	None	1B	Valley and foothill annual grassland on dry hills and plains in clay to clay-loam soils, usually on slopes and often in burned areas; 15-455 meters; July-Oct	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> [<i>Hemizonia parryi</i> ssp. <i>congdonii</i>] Congdon's tarplant	SC	None	1B	Valley and foothill grassland in alkaline soils, sometimes described as heavy white clay; 1-230 meters; June-Nov	Medium. Species is known to occur in several areas in the general vicinity. CNDDDB occurrence west of the project area.
<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i> Suisun thistle	E	None	1B	Grows with <i>Scirpus</i> spp. and <i>Distichlis spicata</i> near small watercourses within salt marsh. Endemic to Sacramento/San Joaquin Delta. Known only from Solano County; 0-1 meter; July-Sept	Low. Only species occurrences are known in Solano County north of project area, across Suisun Bay.

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species Name	Status ¹ (code definitions provided on pg. 16 of 17)			Associated Habitats	Potential to Occur in the Project Site
	Federal	State	CNPS		
<i>Cordylanthus mollis</i> ssp. <i>hispidus</i> hispid's bird's beak	SC	None	1B	Meadows and seeps, playas, valley and foothill grassland in damp alkaline soils, especially in alkaline meadows and alkali sinks with <i>Distichlis</i> ; 10-155 meters; June-Sept	Medium. Species is known to occur in several areas in the general vicinity. Potential habitat in the south spread area.
<i>Cordylanthus mollis</i> ssp. <i>mollis</i> soft bird's beak	E	R	1B	Coastal brackish marsh, often found with <i>Distichlis</i> , <i>Salicornia</i> , <i>Frankenia</i> , etc.; 0-3 meters; July-Sept	High. Species is known to occur in many areas in the immediate vicinity.
<i>Fritillaria liliacea</i> fragrant fritillary	SC	None	1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland; often serpentinite; various soils reported though usually clay in grassland; 3-410 meters; Feb-April	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Helianthella castanea</i> Diablo helianthella	SC	None	1B	Broadleaf upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; usually in chaparral/oak woodland interface in rocky, azonal soils often in partial shade; 25-1150 meters; April-June	Low. Species is known to occur in the general vicinity, however no habitat in the project area.
<i>Hesperolinon breweri</i> Brewer's western flax	SC	None	1B	Chaparral, cismontane woodland, valley and foothill grassland, often in rocky serpentine soil in serpentine chaparral and serpentine grassland; known only from Contra Costa, Napa and Solano Counties; 30-885 meters; May-July	Medium. Species is known to occur in the general vicinity, however no habitat in the project area.
<i>Hibiscus lasiocarpus</i> rose-mallow	None	None	2	Moist, freshwater-soaked river banks and low peat islands in sloughs; in California, known from the Delta watershed; 0-150 meters; Aug-Sept	Medium. Species is known to occur east of project area.
<i>Holocarpha macradenia</i> Santa Cruz tarplant	T	E	1B	Coastal prairie, coastal scrub, valley and foothill grassland in light, sandy soil or sandy clay, often with nonnatives; 10-260 meters; June-Oct	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species Name	Status ¹ (code definitions provided on pg. 16 of 17)			Associated Habitats	Potential to Occur in the Project Site
	Federal	State	CNPS		
<i>Isocoma arguta</i> Carquinez goldenbush	SC	None	1B	Valley and foothill grassland in alkaline soils, flats, and lower hills. On benches near drainages and on tops and sides of mounds in swale habitat. Known only from Contra Costa and Solano Counties; 1-20 meters; Aug-Dec.	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Lasthenia conjugens</i> Contra Costa goldfields	E	None	1B	In vernal pools, swales and low depressions in open grassy areas in valley & foothill grassland and cismontane woodland; extirpated from most of its range; 1-445 meters; Mar-June	Low. Species is known to occur in the general vicinity, however no habitat in the project area.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	SC	None	1B	Freshwater and brackish marshes, often found with <i>Typha</i> spp., <i>Aster lentus</i> , <i>Rosa californica</i> , <i>Juncus</i> spp., and <i>Scirpus</i> spp. Usually on marsh and slough edges. Most of distribution limited to Sacramento/San Joaquin River Delta; 0-4 meters; May-June.	High. Species was found during botanical surveys within the project area. Species is known to occur in several areas in the immediate vicinity.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	SC	R	1B	Freshwater and brackish marshes and riparian scrub, in muddy or silty soil formed through river deposition or river bank erosion; 0-10 meters; Apr-Oct	High. Species was found during botanical surveys within the project area. Species is known to occur in several other areas in the immediate vicinity.
<i>Limosella subulata</i> Delta mudwort	None	None	2	Riparian scrub, freshwater marsh, brackish marsh; usually on mud banks of the Delta on marshy or scrubby riparian association, often with <i>Lilaeopsis masonii</i> ; probably the rarest of the suite of Delta rare plants; 0-3 meters; May-Aug	High. Species is known to occur in many areas in the immediate vicinity.

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species Name	Status ¹ (code definitions provided on pg. 16 of 17)			Associated Habitats	Potential to Occur in the Project Site
	Federal	State	CNPS		
<i>Monardella villosa</i> ssp. <i>globosa</i> robust monardella	SCL	None	1B	Openings in chaparral and cismontane woodland, and coastal scrub; 30-300 meters; June-July	Medium. Species is known to occur in several areas in the immediate vicinity, however the habitat in the project area is not optimal.
<i>Senecio aphanactis</i> rayless ragwort	None	None	1B	Chaparral, cismontane woodland, coastal scrub in drying alkaline flats; 20-575 meters; Jan-April	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Trifolium amoenum</i> showy Indian clover	E	None	1B	Coastal bluff scrub and valley and foothill grassland, sometimes serpentine soil, open sunny site, swales; 5-560 meters; April-June	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.
<i>Tropidocarpum capparideum</i> Caper-fruited tropidocarpum	SC	None	1A	Valley and foothill grassland in alkaline hills; 0-455 meters; March-April	Medium. Species is known to occur in the general vicinity, however the habitats in the project area are not optimal.

¹ California Department of Fish and Game. 2002a. Wildlife and Habitat Data Analysis Branch, California Natural Diversity Data Base, State and Federally Listed Endangered and Threatened Animals of California. July 2002.

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E – Endangered

T – Threatened

PE – Proposed for listing as Endangered

PT – Proposed for listing as Threatened

Ca – Candidate for listing

SC – Species of Concern

MNBMC – Migratory Nongame Birds of Management Concern

D – Delisted

PD – Proposed for Delisting

Pr – CDFG Protected

F Pr – CDFG Fully Protected

California Native Plant Society

S1.1 – Very Threatened and less than 6 environmental occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres

S2.2 – Threatened and 6-20 EOs OR 1,000-3,000 individuals OR 2,000 – 10,000 acres

S3.1 – Very Threatened and 21-100 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

1B – Rare or Endangered in California and elsewhere

² CNDDDB (California Natural Diversity Data Base). 2001. RAREFIND search report for the Vine Hill quadrangle. November 5, 2001.

CNDDDB. 2002. RAREFIND search report for the Vine Hill quadrangle. January 2, 2002

³ Fish sampling efforts within Peyton Slough occurred during two studies:

May 1986 through April 1987: Peyton Slough was sampled within the Action Area (Hagar, J., F. Demgen. 1987. Biological survey of Peyton Slough and two reference sloughs for the Mt. View Sanitary District Wetlands Enhancement Program. December 1987)

Fall 1998 through summer 2001: Peyton Slough was sampled upstream of the Action Area, within the McNabney Marsh (McGinnis, S., J. Koehler. 2001. The Use of Several Restored, Partially Restored, and Highly Modified Tidal Marshes in the San Francisco Bay Estuary by Native and Introduced Fishes. Prepared as part of the CalFed Cooperative Agreement between the California State University, Hayward Foundation and the U.S. Fish and Wildlife Service, Agreement # 114209J018. California State University, Hayward. September 1, 2001)

⁴ Critical habitat designations for Central Valley spring-run Chinook and Central Valley fall/late fall-run Chinook salmon are currently withdrawn pending further review.

TABLE 3. SPECIAL STATUS SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT VICINITY

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